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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,352

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Thomas M. Rent

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EXAMINER

CHANG, YEAN HSI

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/806,352	Applicant(s) RENT, THOMAS M.	
	Examiner Yean-Hsi Chang	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kakuta et al. (US 5,600,783).

Kakuta teaches an electronic data storage apparatus (fig. 1A) for use in connection with an electronic data processing device (1, fig. 1), comprising: a removable substrate (5A) configured for selective installation in said data processing device, at least one electronic data storage device (5), said at least one electronic data storage device mounted on said substrate (fig. 1), a controller (drive interface circuitry 20) mounted on at least one of said plurality of substrates for controlling transfer of data to and from said at least one electronic data storage device and said data processing device, electrical circuitry (19) operably associated with said substrate and said at least one electronic data storage device, and means (bus 37) for electrically connecting said electrical circuitry with said data processing device (claims 1, 4 and 7); wherein said substrate comprises a printed circuit card (see col. 5, lines 56-57) (claim 2); wherein said at least one electronic data storage device comprises a hard disk drive (5) (claim 3); and wherein said means for electrically connecting said electrical circuitry with said

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data processing device comprises a multi-pin electrical connector (shown in fig. 2B) (claim 5).

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Kakuta et al.

Kakuta teaches an electronic data storage apparatus (fig. 1A) for use in connection with an electronic data processing device (1, fig. 1), comprising: a plurality of substrates (5A), wherein each of said substrates is configured for selective installation in said electronic data processing device (shown in fig. 2), at least one electronic data storage device (5) mounted on each of said substrates (fig. 1), electrical circuitry (19) operably associated with each of said substrates and said at least one electronic data storage device, and a controller (drive interface circuitry 20) for controlling transfer of data to and from said at least one electronic data storage device mounted on each of said substrates (see fig. 3 and col. 5, lines 56-57).

4. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Kakuta et al.

Kakuta teaches an electronic data processing apparatus (fig. 1A) comprising: a processing unit (1, fig. 1), a data storage apparatus (5A, fig. 1) including a removable substrate (5A, fig. 2, 5A is removable from 27), an electronic data storage devices (5) mounted on said substrate, electrical circuitry (19) operably associated with said substrate and said electronic data storage device (shown in fig. 1), and means (37) for electrically connecting said electrical circuitry with said processing unit (shown in fig. 1), a controller (drive interface circuitry 20) mounted on said substrate for controlling the

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transfer of data to and from said at least one data storage device and for controlling the transfer of data to and from said at least one processing unit (see fig. 3), and a switch (11) for directing data from at least one of said processors to at least one of said data storage devices and for directing data from at least one of said data storage devices to at least one of said processors (see fig. 3 and col. 5, lines 35-64).

5. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Kakuta et al.

Kakuta teaches an electronic data storage apparatus (fig. 1A) comprising: a substrate (5A) adapted for selective insertion into a chassis (a chassis may be represented by motherboard 37), at least one first electronic data storage device (5) connected to said substrate (fig. 1), a controller (drive interface circuitry 20) mounted on said substrate for controlling the transfer of data to and from said at least one first electronic data storage device (see fig. 3), said substrate comprising at least one electrical conductor (16) corresponding to said at least one first electronic data storage device, and said at least one first electronic data storage device electrically coupled to said at least one electrical conductor (shown in fig. 3).

Response to Arguments

6. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments with respect to claims 8-10 filed 10/20/2005 have been fully considered but they are not persuasive. Applicant argues, reference "Kakuta does

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not disclose or suggest a controller mounted on a removable substrate". Referring to fig. 3 of Kakuta, a drive interface circuit 20 may be considered as a data controller, the detailed function of interface circuit 20 is not given, however, it may be considered as similar to the interface circuit 30 shown in the same figure, that comprises microprocessor 17 for a controlling operation as stated on col. 5, lines 51-52. Drive interface 20 is mounted on substrate 5A as claimed in claims 8-10.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang
Primary Examiner
Art Unit: 2835
November 9, 2005



YEAN-HSI CHANG
PRIMARY EXAMINER